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The Impact of the Common Agricultural Policy Rebalancing on the U.S., The European Community, and the World: The Basis for Agreement

By

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The 1962 Dillon Round of the General Agreement on Tariffs and Trade (GATT) committed the European Community (EC) to duty-free bindings (no restrictions) on oilseed imports. This concession was given by the EC in exchange for allowing trade barriers in the newly formed Common Agricultural Policy (CAP) to protect high domestic price supports on grains from foreign imports. CAP border measures isolated the high supports from world markets.

In 1962 the European Community was a net importer of major farm commodities. Grain exporting countries did not foresee that the high grain price supports and increased productivity would eventually give the EC a major grain surplus which would, in the absence of production controls, receive massive export subsidies. Duty-free access of oilseeds and

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corn-gluten feeds reduced opportunities to feed excess EC grains to livestock. Given the chance in the 1990s to renegotiate the Dillon Round, in all likelihood the Europeans would not agree to exclude oilseeds from their Common Agricultural Policy nor would the United States agree to no limitations on export subsidies to dispose of EC grain surpluses.

Rapid expansion of the EC livestock sector has made oilseed components of feeds very important. The EC is the world leader in oilseed consumption and oilseed imports. The Community would like to extract the internal farm income and price stability benefits of variable levies and reduce internal competition from cheap protein feeds in this huge market but has been unsuccessful thus far.

Farm income benefits, stability and levy receipts are not the only reasons for desiring change. The left panel in Figure 1 illustrates the high supports and isolation achieved by EC border measures in most commodities, including grains. High domestic market price support (P_s) in excess of world market price P_w has decreased consumption (q_d to q_d') and increased production (q_s to q_s'). EC agricultural officials perceive that extensive market support in grains and other crops has caused distortions in the grain sector and in the unprotected oilseed sector. Increased production in grains has shifted production away from substitutes such as oilseeds, reducing supply s to s´ (right panel of Figure 1). High prices for grain components of feed mixes has also shifted demand toward non-grain ingredients such as oilseeds, raising oilseed demand d to d´. These distortions have increased oilseed imports from q_d-q_s to q_d'-q_s'.

Additionally, export subsidies on grains, area a+b+c in the left panel, have become very demanding on the CAP budget. Prohibition of oilseed import restrictions preclude tariff receipts to help balance the CAP budget.

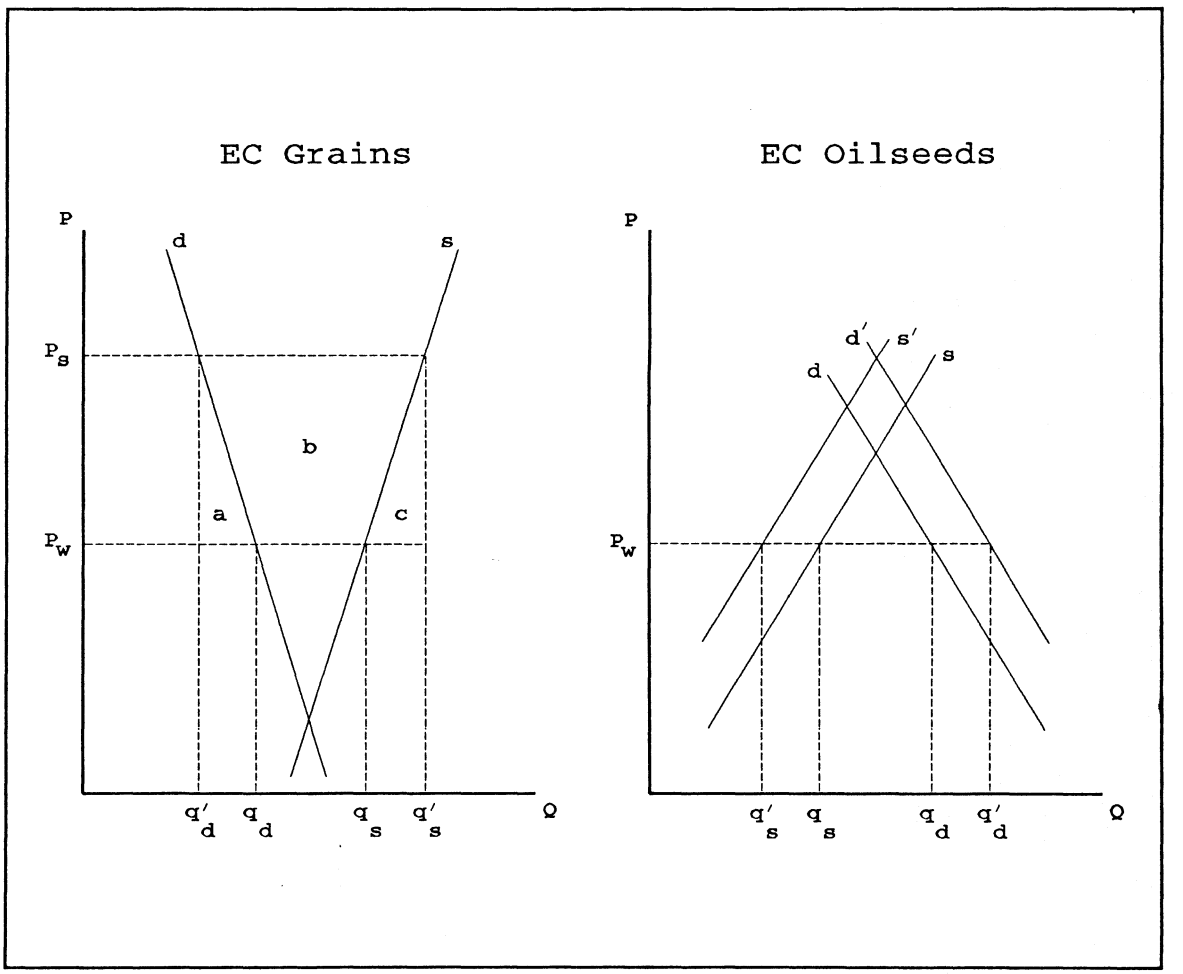

Figure 1. Oilseed Distortions from EC Market Price Support to Grains.

The European Community would like to retain grain support and export subsidy opportunities while pulling oilseeds inside the CAP barriers, but other countries in the GATT have rejected this option. The EC solution up to 1989 had been an oilseed import

substitution policy in the form of a processor subsidy which allowed a premium to be passed on to Community producers. This premium was expanded many times in the 1980s and resulted in a doubling of oilseed production in the Community between 1982 and 1987.

The producer subsidy is illustrated in Figure 2. The EC subsidized price P_s in the left panel shifts the domestic supply to ss´. EC demand shifted from ED to ED´´ in the center panel and world price fell from P_w to P_w' which hurts ROW producers such as U.S. farmers (loss area 1+2+3+4, right panel). EC oilseed consumers, still able to purchase at the world price p_w', benefitted by area c+d+e and producers by area a compared to a free market equilibrium at P_w. European taxpayers must expend area a+b+c+d to support the policy. Instead of generating levies like other EC imports, the oilseed policy further strains the CAP budget. Even with this producer subsidy, the distortions from not having oilseeds inside CAP barriers are not fully removed. Feed processors purchasing oilseeds at world prices continue to find them a bargain compared to highly protected grains.

In December 1987 the American Soybean Association (ASA) filed a section 301 Unfair Trade Petition against the European Community. The petition alleged that the EC oilseed subsidies constituted a thinly disguised import barrier. The Dispute Settlement Panel of the General Agreement on Tariffs and Trade (GATT) ruled in December, 1989 that the European oilseed subsidies violate GATT trading rules and discriminate against oilseed imports. In view of this most recent development, the producer subsidy will be eliminated unless multilateral negotiations approve the subsidy as part of a broader agreement that could reduce EC grain export subsidies.

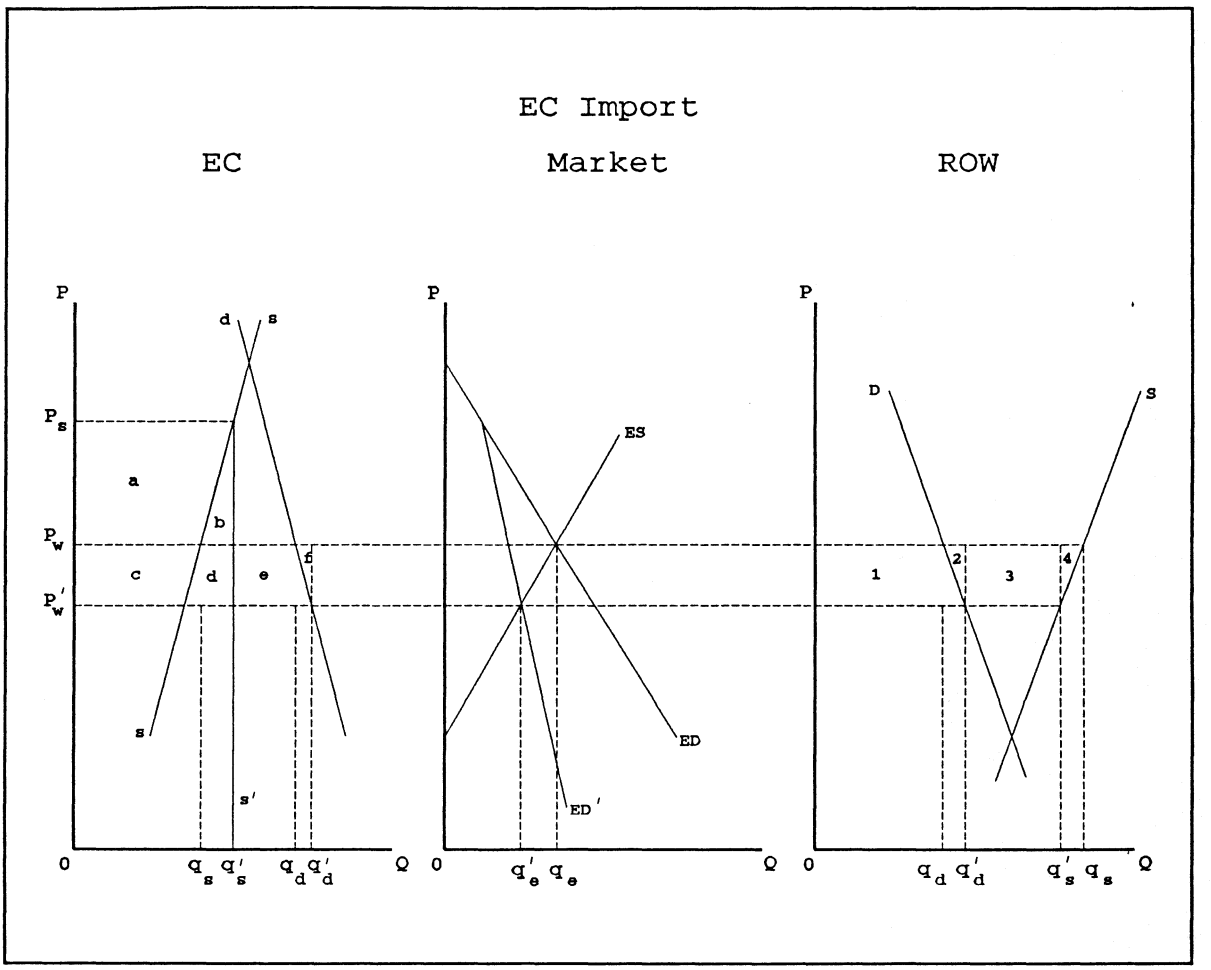

Figure 2. EC Oilseed Producer Subsidy.

European Community policy makers describe a move toward equal levels of market support across all related commodities as "rebalancing." Community leaders would prefer to rebalance oilseeds at high levels without disturbing grain supports. Such a plan is impossible given the opposition of exporters including the United States. In recent meetings of the Uruguay Round of GATT, EC negotiators have been pressing a rebalancing proposal to bring oilseeds behind CAP barriers while concurrently lowering all commodity supports to a uniform level.

To be acceptable to the U.S., a uniform level of support to rebalance EC commodities must leave U.S. producers at least no worse off. One issue is whether such a rebalancing solution exists. Given present oilseed subsidies, it is unlikely that rebalancing at reduced support levels could leave EC producers indifferent without direct income compensation. The objective of this paper is to estimate the impact on the European Community and the U.S. of an EC rebalancing scheme that might be acceptable to negotiators.

Conceptual Framework

Conceptual models in Figures 3 and 4 depict the effects of incorporating oilseeds in the CAP system of variable levies and of lowering market supports for grains. In Figure 3 the processor subsidy (assumed to be passed to producers at price P_s) is extended to uniform market protection for grains and oilseeds. The EC domestic support price P_s determines consumption as well as production. Demand shifts from free market level dd to dd´. Supply shifts from ss to ss´ and imports fall from q_d-q_s to q_d'-q_s'. Reduced imports lower world price to P_w'. European producers are not affected but consumers lose area a+b+c+d. The position of European taxpayers changes from paying the area a+b in Figure 2 to collecting levies c+e in Figure 3. The lower world price benefits U.S. oilseed consumers by area 1+2 but producers lose area 1+2+3 in the right panel.

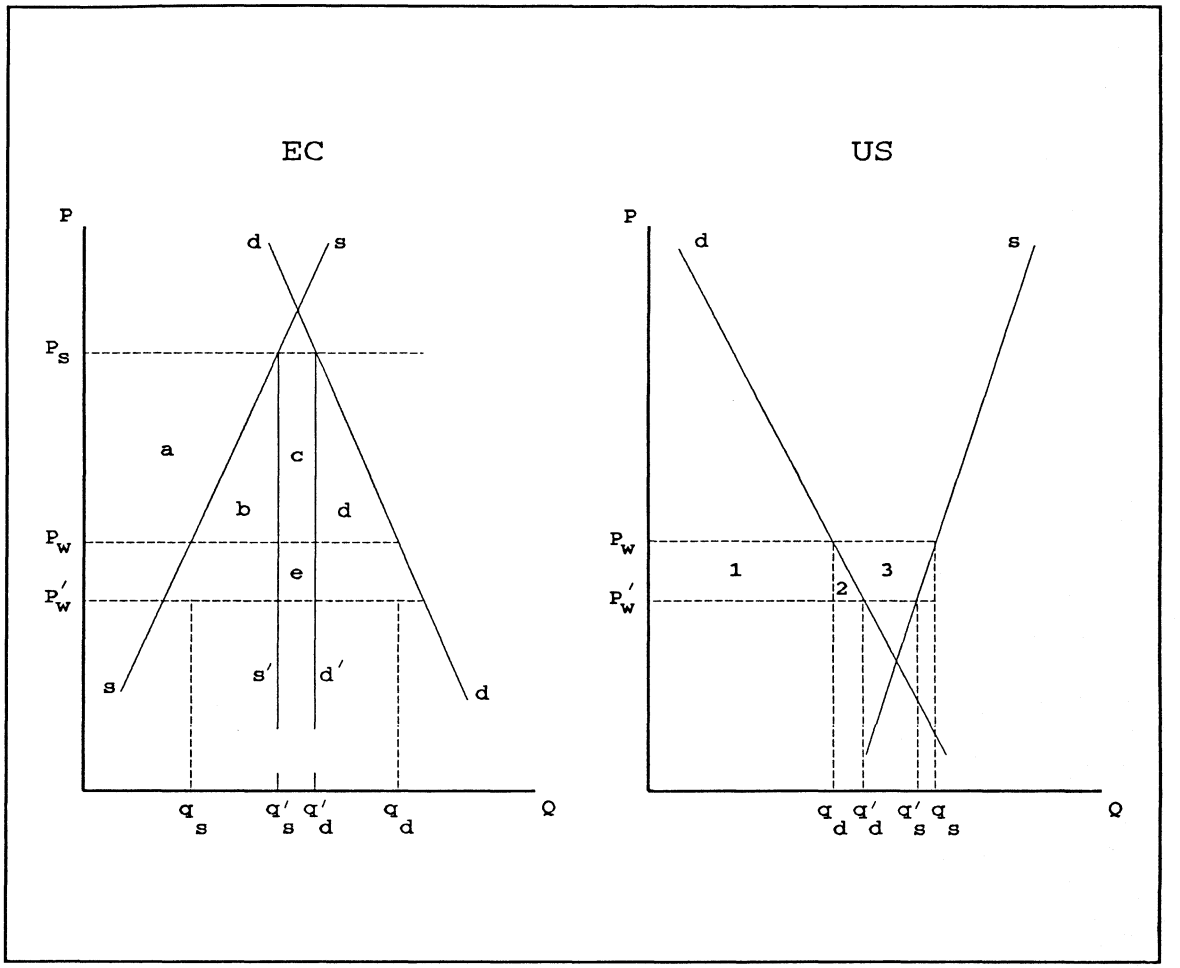

Figure 3. EC Change from Oilseed Producer Support to Full Market Protection.

Figure 4 depicts a lower level of intervention in the EC grain market. European consumers benefit by area a+b while producers are worse off by area a+b+c. Taxpayers benefit by area b+c+d+e+f+g+h+i+j+k. The increased receipts evident in Figure 3 and the savings in export restitution from Figure 4 potentially could enable the EC to directly compensate producer losses with a decoupled payment without further budget expenditure. World grain price raised from P_w with the current policy to P_w' from lower EC grain exports

in Figure 4 benefits U.S. producers by area 1+2+3. U.S. consumers are worse off by are 1+2.

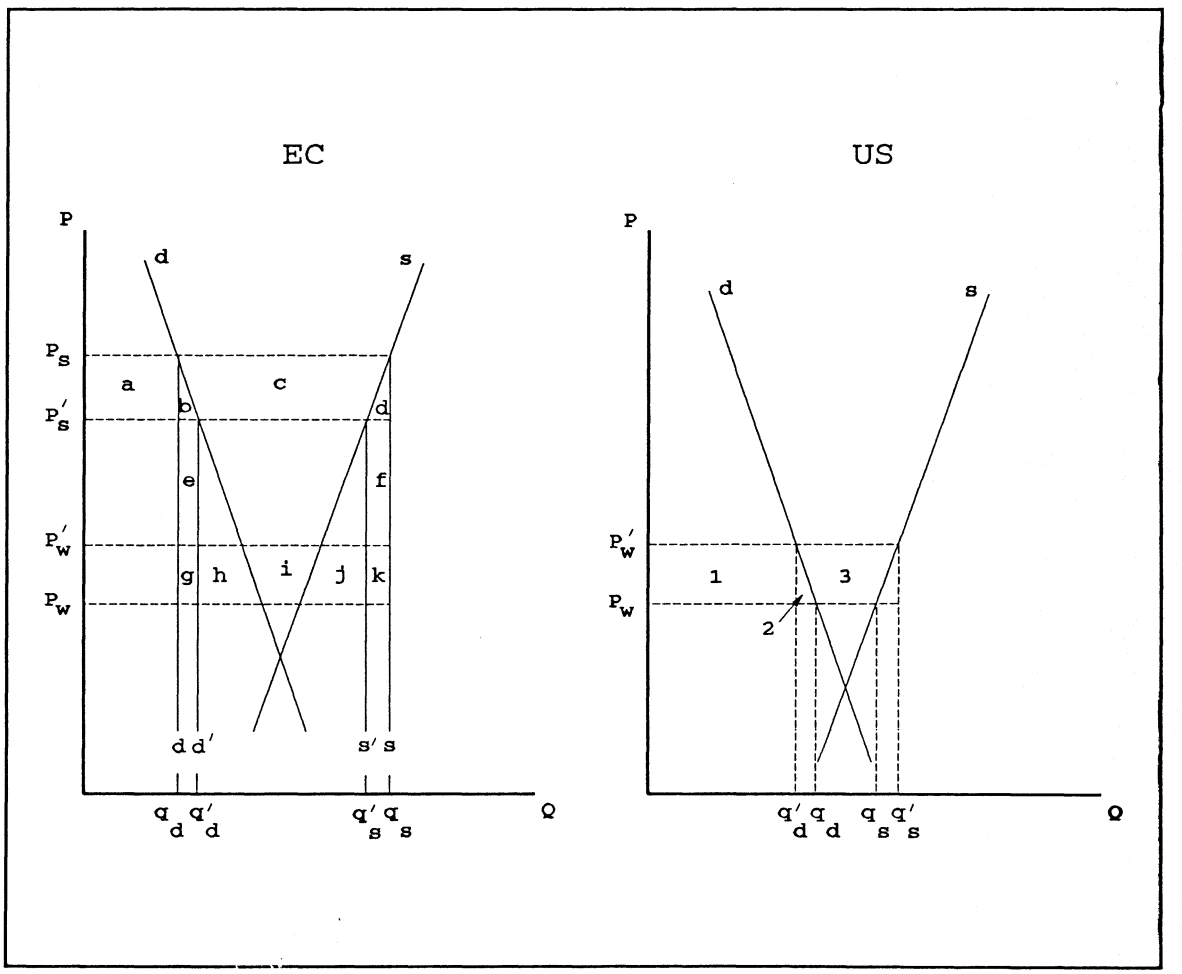

Figure 4. Impacts of EC Grain Export Subsidy Reduction.

The conceptual framework does not reveal whether a uniform level of EC support to oilseeds and grains will balance losses to U.S. oilseed producers (Figure 3) with gains to U.S. grain producers (Figure 4). The simplified partial equilibrium conceptual model does not account for individual country impacts or interactions among commodities. These are

best analyzed with a mathematical international trade model. Impacts of rebalancing are quantified for the EC and the U.S. in the next section.

Empirical Analysis

Impacts of including oilseeds in a rebalanced Common Agricultural Policy were quantified using a nine-region world trade model incorporating the assumptions of neoclassical trade theory (see Roningen, *et al.*; Sullivan, *et al.*; Gleckler and Tweeten for description of model). Data for 1989 were used to initialize the model. Results reflect changes from 1989 conditions and are in 1989 prices. The behavioral coefficients apply to an intermediate-run period of 4 to 5 years, other things equal. The model simultaneously estimates changes in markets for nine commodities: beef, pork, poultry meat, wheat, corn, other coarse grains, oilseeds (principally soybeans, rapeseed, and sunflower seed), oilmeal and sugar. Substitutability and complementarity among commodities are accounted for in behavioral equations.

Uniformity of support with EC rebalancing was represented in the empirical analysis as a percentage of market prices. Table 1 shows 1989 grain and oilseed prices in the EC were from 128 percent to 166 percent of the world market price. Rebalancing was simulated by giving oilseeds and oilmeal uniform market protection by realigning oilseed and grain supports. Different levels of uniform support were simulated (110 percent, 120 percent, etc.) in an attempt to discover a rebalancing where gains to U.S. grain producers offset losses to U.S. oilseed producers, leaving aggregate producer surplus nearly unchanged.

Table 1. 1989 Actual EC Price Support as a Percent of World Market Price.

Commodity	Percent of World Market Price
Wheat	144
Corn	166
Coarse Grains	128
Oilseeds	147
Weighted Average	142

The uniform EC support which most nearly balances U.S. producer losses and gains was 120 percent of 1989 world prices. (The net U.S. producer surplus gain for nine commodities was only $19 million.) At levels of uniform EC support above 120 percent, U.S. oilseed producer losses exceeded grain producer gains. At levels of EC support below 120 percent the reverse was true. The 140 percent uniform level (the weighted average from Table 1) simulates the case where oilseeds are brought behind CAP barriers and support to EC grains is little changed. Uniform EC support at 140 percent of unsupported world market prices indicates EC producer surplus change to be minimal ($13 million in Table 2).

The data in Table 2 indicate that there is indeed a solution to EC rebalancing which causes minimal net impacts on US producer incomes. This uniform level of support is approximately one-half the current average increment over 1989 EC border prices for grains and oilseeds. In the case of wheat it represents a drop in support from approximately $6.70

per bushel to $5.59 per bushel. The reduction from 140 percent to 120 percent may seem dramatic, but may be the minimal reduction the U.S. could agree to without intense opposition from American farmers if oilseeds were brought fully into the CAP. For that reason this solution is worthy of further attention.

Table 2. Producer Surplus Change at Different Levels of EC Rebalancing.

Uniform Support of Grains and Oilseeds	Producer Surplus Change for All Commodities		
	US	EC	ROW
(Percent of world trade price)		($ million)	
140	-565	13	-1987
130	-338	-1884	-410
120	19	-4360	1777
110	238	-4891	2818

Table 3 lists changes in world prices when EC grains and oilseeds are rebalanced at the 120 percent level. As expected, the greatest impacts come in the grain and oilseed markets. World prices in other markets do not change appreciably.

Table 3. Changes in World Prices when EC Rebalances at 120 Percent Level.

Commodity	Percent Change
Beef	-0.20
Pork	-1.50
Poultry Meat	-0.88
Wheat	8.80
Corn	4.73
Coarse Grains	-1.44
Oilseeds	-3.14
Oilmeal	-4.04
Sugar	-0.58

Shocks to world markets originate in the European Community whose response to rebalancing at the 120 percent level is presented in Table 4. Livestock production expands due to less expensive grain feed components. EC wheat and corn market prices fall considerably with rebalancing at 120 percent. This induces significant decreases in EC production, increases in consumption and decreases in exports. Prices of coarse grains are not supported as much as those of wheat and corn (Table 1), and the significant shift out of wheat and corn acreage results in a net increase in coarse grain, oilseed and sugar beet production. Consumption in the oilseed markets is no longer at world prices; the result is reduced demand quantity and lower imports.

Table 4. Impacts on European Community from Rebalancing at 120 Percent Level.

Commodity	Production	Consumption	Net Trade
	(% change)	(% change)	(metric ton change)
Beef	0.21	0.00	16
Pork	4.36	0.00	536
Poultry Meat	2.09	0.00	126
Wheat	-16.28	7.54	-17387
Corn	-17.42	18.62	-9549
Coarse Grains	8.19	-0.62	4844
Oilseeds	4.23	-8.65	2559
Oilmeal	-1.59	-5.68	1362
Sugar	0.92	-0.75	227

Impacts of EC 120 percent rebalancing on U.S. markets are presented in Table 5. Although Table 2 showed that the net producer income impacts are slightly positive in aggregate, the production column of Table 5 indicates a redistribution of benefits from all other producers to wheat and corn producers. Coarse grain and oilseed production declines are offset by wheat and corn increases. The increased U.S. grain exports capture about 21 percent of the world trade opened by lower EC grain supports.

Table 5. Impacts on U.S. Markets from EC Rebalancing at 120 Percent Level.

Commodity	Production	Consumption	Net Trade
	(% change)	(% change)	(metric ton change)
Beef	-0.04	-0.01	-4
Pork	-1.60	0.63	-163
Poultry Meat	-0.24	0.20	-43
Wheat	2.57	-1.87	1826
Corn	1.07	-1.29	3854
Coarse Grains	-1.43	1.16	-706
Oilseeds	-2.13	-0.34	-1123
Oilmeal	-0.95	1.50	-567
Sugar	-0.40	0.29	-47

The redistribution of income among producers is apparent in Table 6. Understandably, EC grain farmers incur the largest losses in the rebalancing scheme. Oilseed producers are slightly worse off because the 120 percent support is below what they receive currently under the processor subsidy scheme. European CAP budget gains more than cover producer losses. The savings ($4,374 million) represent almost 18 percent of the Community's 1989 agricultural budget. At 120 percent rebalancing, CAP administrators could conceivably use the budget savings to directly compensate EC grain and oilseed producers, leaving a net welfare gain of $2,524 million to the Community. Although livestock feeders must purchase oilseed ingredients at high internal prices, EC consumers are left with a huge net welfare gain ($2,510 million).

Table 6. Welfare Impacts of EC Rebalancing at 120 Percent Level.

Commodity	Producers	Consumers	Taxpayers	Welfare
		($ million)		
European Community				
Beef	28	0	-8	
Pork	408	0	-251	
Poultry Meat	91	0	-57	
Wheat	-3956	3544	1311	
Corn	-1219	1717	655	
Coarse Grains	78	440	-167	
Oilseeds	-241	-1885	2361	
Oilmeal	411	-1307	558	
Sugar	40	0	-28	
Total	-4360	2510	4374	2524
United States				
Beef	-19	24	0	
Pork	-175	171	0	
Poultry Meat	-65	76	0	
Wheat	393	-161	0	
Corn	479	-371	0	
Coarse Grains	-41	21	0	
Oilseeds	-341	233	0	
Oilmeal	-204	221	0	
Sugar	-8	5	0	
Total	19	219	0	238
Rest of World				
Beef	-88	86	0	
Pork	-797	820	0	
Poultry Meat	-113	132	0	
Wheat	3637	-4132	0	
Corn	791	-1017	0	
Coarse Grains	-340	264	0	
Oilseeds	-860	885	0	
Oilmeal	-355	423	0	
Sugar	-98	93	0	
Total	1777	-2446	0	-699

U.S. producer and consumer redistributions are fairly significant in pork, wheat, corn, and oilseeds. Overall producer surplus gain is minimal (the object of rebalancing at 120 percent) but consumers gain considerably. This redistribution illustrates how policies in Europe have distorted production and consumption in the U.S.

The rest of the world (outside the U.S. and EC) is a net importer of agricultural commodities. Higher world grain prices dominate the welfare impacts on this group of countries and consumer losses exceed producer gains. Net welfare gain to the world as a whole of over $2 billion indicate gainers (mainly the EC) could in principle not only compensate losers but also have a considerable remaining surplus to provide foreign economic development assistance or benefits in other forms.

Conclusions

A world trade model determined the uniform internal price level at which the European Community could rebalance commodity supports to leave net U.S. producer surplus essentially unchanged from the 1989 level. In total producer welfare terms, the U.S. could justify support of European rebalancing if EC supports are no more than 120 percent of the 1989 world market price. However, net welfare gains to U.S. consumers and the nation as a whole would be substantial.

EC rebalancing would entail considerable producer income redistribution in the U.S. If potentially divisive political and economic problems with U.S. producer income redistribution could be overcome, significant net gains could accrue to U.S. consumers with

EC rebalancing. Reducing EC support levels would respond to another U.S. objective -- reducing EC grain export subsidies.

The EC is the major beneficiary of rebalancing grain and oilseed price supports under the CAP at a uniform level of 120 percent of 1989 world market prices rather than the 1989 actual supports averaging 140 percent of world prices. The magnitude of the gain to the EC is over ten times that of the U.S. The rebalancing results in large EC budget savings and considerable consumer surplus gains. Because EC producer income would fall, rebalancing might need to be phased in over several years and attended by decoupled direct payments and related adjustment assistance to producers.

Net welfare gains to the EC, the U.S., and the world would be even larger if rebalancing results in EC supports less than 120 percent of 1989 average EC supports. Clearly, a basis exists for further negotiations and agreement to cap the CAP.

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